

ABSTRACT

A communication device is provided with a turbo encoder (1) which carries out a turbo encoding process on the lower two bits of transmission data so as to output two-bit information bits and two-bit redundant bits that are generated so as to uniform the correction capabilities with respect to the respective information bits; a turbo decoder (a first decoder (11), a second decoder (15), etc.) which carries out a soft-judgment on the lower two bits of a received signal that are susceptible to degradation in characteristics, and also carries out an error-correction process using Reed Solomon codes thereon so that the information bits of the lower two bits are estimated, and a third judging device (22) which carries out a hard-judging process on the other bits of the received signal so that the other upper bits are estimated.